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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,830	08/27/2003	Akira Sumiyashiki	740165-361	3922

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WASHINGTON, DC 20004-2128

EXAMINER
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HAUGLAND, SCOTT J

ART UNIT	PAPER NUMBER
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3654

DATE MAILED: 07/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/648,830

Applicant(s)

SUMIYASHIKI, AKIRA

Examiner

Scott Haugland

Art Unit

3654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/10/03</u> .  | 6) <input type="checkbox"/> Other: ____.                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 and 8-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language "engagement teeth fixedly supported at the frame" referring to teeth 134 appears to be inaccurate and to be inconsistent with claim 1, lines 11-12.

The language of claim 8, lines 2-3 appears to be inaccurate. It appears that "axially" on lines 2 and 3 should be --radially--.

The language of claim 9, lines 1-2 appears inaccurate and inconsistent with parent claim 5 since the pawl 62 of claim 5, line 20 is separate from the holding device 136, 138. The pawl recited in claim 9, line 1 appears to be 138.

The relationship between the pawl recited in claim 12 and the pawls recited in claim 5, line 20 and claim 9, line 1 is not clearly set forth in the claims.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3654

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 15, 16, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Butenop (U.S. Pat. No. 5,348,248).

Butenop discloses a webbing retractor in which, when a webbing for restraining a vehicle occupant is suddenly pulled-out, an inertia plate M provided integrally and coaxially at an axial end side of a take-up shaft, which is supported so as to be rotatable around an axis at a frame 11 fixed to a vehicle body and which takes-up the webbing in layers by urging force, causes a rotation delay with respect to the take-up shaft, and causes a swingably-supported pawl 42 to swing and causes the pawl to engage with engagement teeth 43, thereby locking rotation of the take-up shaft in a webbing pull-out direction, wherein the engagement teeth 43 are provided so as to be rotatable around an axis with respect to the frame, and the webbing retractor comprises a holding device 20, 21 which, when a vehicle occupant cancels an applied state of the webbing and an entire amount of the webbing is taken-up onto the take-up shaft by urging force, holds the engagement teeth 43 in a rotatable state, and which, at other times, holds the engagement teeth in a state in which rotation of the engagement teeth in the webbing pull-out direction is impeded.

With regard to claims 2 and 18, arm 22 is seen to be part of a cam mechanism. In addition, the pawl 20 is controllable by a cam mechanism as required by the claim.

With regard to claim 4, the retractor can be controlled in the claimed manner.

The method of claims 15, 16, and 18 is inherent in the operation of the device.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sumiyashiki et al (U.S. Pat. Appl. Pub. No. 2002/0008171) in view of Butenop (U.S. Pat. No. 5,348,248).

Sumiyashiki et al discloses a webbing retractor comprising: a take-up shaft 14 taking-up, in layers and by urging force, a webbing 50 for restraining a vehicle occupant; a frame 12 fixed to a vehicle body and rotatably supporting both end portions of the take-up shaft, and lock teeth 12d, 12e are formed at a surface of the frame which surface intersects an end portion of the take-up shaft; a lock plate 16 provided at at least one end portion side of the take-up shaft, and able to move between a position of engagement with the lock teeth 12d, 12e and a position of non-engagement with the lock teeth, the lock plate impeding rotation of the take-up shaft in a webbing pull-out direction by engaging with the lock teeth; a lock wheel 18 provided coaxially at one end portion side of the take-up shaft, and the lock wheel 18 usually rotates integrally with the take-up shaft and holds the lock plate 16 at the position of non-engagement, and when

relative rotation arises between the take-up shaft 14 and the lock wheel 18, the lock wheel moves the lock plate 16 to the position of engagement; a pawl 24 swingably supported at the lock wheel, and usually held at a non-swung position by urging force; an inertia plate 22 disposed coaxially to the lock wheel and provided so as to be able to rotate relatively within a predetermined range, and the inertia plate usually rotates integrally with the lock wheel, and when the webbing is suddenly pulled-out, the inertia plate causes a rotation delay with respect to the take-up shaft, and moves the pawl 24 from the non-swung position to a swung position against urging force of spring 26; an engaging member 28a disposed coaxially to the lock wheel, and engagement teeth 28b are formed at the engaging member at a peripheral surface side thereof opposing the pawl 24, and the engagement teeth engage with the pawl and stop rotation of the lock wheel in the webbing pull-out direction due to the pawl moving to the swung position.

Sumiyashiki et al does not disclose that engaging member 28a is rotatable and does not disclose a holding device which, when a vehicle occupant cancels an applied state of the webbing and an entire amount of the webbing is taken-up onto the take-up shaft by urging force, holds the engaging member in a rotatable state, and which, at other times, holds the engaging member in a state in which rotation of the engaging member in the webbing pull-out direction is impeded.

Butenop teaches providing a webbing retractor with a rotatable engaging member 17, 43 and a holding device 20, 21 that holds the engaging member in a rotatable state when a vehicle occupant cancels an applied state of the webbing and an entire amount of the webbing is taken-up onto the take-up shaft, and which, at other

times, holds the engaging member in a state in which rotation of the engaging member in the webbing pull-out direction is impeded.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the webbing retractor of Sumiyashiki et al with a rotatable engaging member and a holding device that holds the engaging member in a rotatable state when the webbing is not applied to a vehicle occupant and the entire webbing is taken-up onto the take-up shaft as taught by Butenop to prevent locking up of the reel of the retractor when the webbing is fully wound on the take-up shaft.

With regard to claim 8, it would have been obvious to provide a pair of retaining means on the inner surface of the boss as is old and well known. Such retaining means are seen to be claws as broadly disclosed and claimed.

With regard to claim 12, arm 22 is seen to be part of a cam mechanism. In addition, the pawl 20 is controllable by a cam mechanism as required by the claim.

With regard to claim 14, the retractor can be controlled in the claimed manner.

Claim 17 rejected under 35 U.S.C. 103(a) as being unpatentable over Butenop (U.S. Pat. No. 5,348,248) in view of Frost (U.S. Pat. No. 3,598,336).

Butenop is described above.

Butenop does not disclose the step of canceling impeding of rotation of the engaging member by determining that the webbing is in a state in which the entire amount of the webbing is taken-up by sensing a number of times of rotation of the take-up shaft.

Frost teaches determining the amount of webbing wound on a take-up shaft of a webbing retractor by counting the number of times the shaft has rotated as an alternative to sensing the amount of webbing on the retractor (col. 1 lines 11-15).


It would have been obvious to one having ordinary skill in the art at the time the invention was made to sense the number of times the take-up shaft has rotated to determine when the webbing has been fully wound onto the take-up shaft of the retractor in lieu of sensing the diameter as taught by Frost since Frost teaches counting take-up shaft revolutions is a suitable alternative to sensing the amount of belt on the take-up.

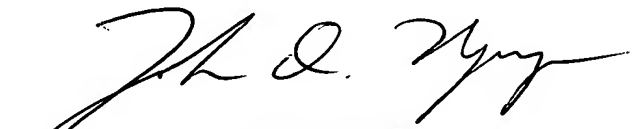
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Haugland whose telephone number is (571) 272-6945. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
sjh  
6/12/06

  
**JOHN Q. NGUYEN**  
**PRIMARY EXAMINER**